

REMARKS

Claims 1-30 were pending in the application prior to entry of this amendment, which adds new dependent claims 31-32.

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being obvious over Rebeske (US Pat. No. 6,295,038 B1) in view of Lee (US Pat. No. 6,191,758 B1).

Applicants traverse the rejections and hereby amend claims 1, 15, 27 and 28 more definitely and distinctly to describe their invention. Reconsideration is requested.

Claims Rejections – 35 USC § 103

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being obvious over Rebeske (US Pat. No. 6,295,038 B1) in view of Lee (US Pat. No. 6,191,758 B1).

Independent claims 1, 15 and 27 are amended hereby more clearly to describe applicants' invention as involving a novel configuration of a main and auxiliary display for a hand-held portable device, wherein the main display is fixedly mounted in a housing of the device and wherein the auxiliary display is adjustably mounted to the housing for deployment by a user of the device to a position that enables concurrent viewing by the user of the main and auxiliary displays.

New dependent claims 31 and 32 describe a further feature of the invention by which the main display is used to implement conventional user input functions, e.g. keyboard or data entries, and by which the auxiliary display is used to implement conventional user output functions, e.g. text or graphic display, a combination not heretofore contemplated despite the long-standing need for such a dual- and extended-function dual display feature in portable hand-held devices, e.g. personal digital assistants (PDAs). No new matter is added by these amendments, as such features are amply described and illustrated at page 3, lines 9-12, lines 20-22; page 7, lines 1-7; Figs. 1 and 2.

Conventional approaches to PDA display management is to split the screen into two or more functional areas dedicated to separate input or output user requirements. For example, many PDAs set aside the bottom portion of a screen with a miniature so-called 'soft' (programmed and selectively displayed rather than physical) QWERTY keyboard for alphanumeric data entry while the upper portion of the screen accommodates user output, e.g. text or graphic displays. Such conventional touch-sensitive displays are only approximately

palm-sized so that the soft keyboard keys are separated from one another by only millimeters, rendering accurate data entry difficult at best, even with the use of a pointed stylus.

Increasingly, PDAs are equipped with e-mail messaging and/or web browsing and/or e-book reading capability via wireless uplinks or modem cradles. But these applications are data intensive and reading is exacerbated by the use of split display screens only a small portion of which can be dedicated to text or graphic presentation of downloaded data.

Conventional approaches to solving this small, dual-purpose display screen problem, which is unique to portable hand-held devices are described below. (Such a problem does not exist and thus no solution is proposed as claimed by applicant with the desktop computer of Lee or the laptop computer of Rebeske, both of which have full-size display screens and separate, physical, full-function and full-size QWERTY keyboards.)

Some manufacturers have addressed this problem unique to portable hand-held input/output (I/O) devices such as PDAs by providing physically separate but connectable, full-size QWERTY keyboards having a fan-fold design for relative compactness. Still, such auxiliary keyboards effectively and undesirable double the volume and mass of the portable hand-held device, *thereby diminishing its portability*. Still others have proposed an auxiliary, desktop surface, laser-based simulated keyboard that detects the position of fingers and thumbs typing thereon. Perhaps needless to say, such an auxiliary input device renders the hand-held device for which it is designed *unportable*.

The present invention effectively doubles the display area in a portable hand-held device without diminishing its portability or its ability to be hand-held. It does so by adjustably mounting an auxiliary display to the housing for the fixedly mounted main display and configuring the auxiliary display for deployment for concurrent viewing by a user of the auxiliary and main displays. It does so while permitting the auxiliary display selectively to be stowed within or adjacent the housing or deployed thereby. It does so while only marginally, if at all, increasing the footprint, mass or volume of the portable hand-held device. Finally, it does so in accordance with a preferred embodiment of the invention by utilizing the main display principally for user input functions, e.g. via a soft keyboard of much larger area or other augmented user input such as large-pattern soft pushbuttons, and the auxiliary display principally for user output functions, e.g. via a display of much larger area, thereby greatly improving the user interface.

Rebeske provides a slide-out-and-fold-down-into-an-A-frame configuration auxiliary display for concurrently displaying to an opposing audience "the same information displayed on the first display screen" visible to the user of a laptop computer that, while somewhat

portable, certainly is not hand-held, having a conventional and separate physical keyboard (see Abstract). Lee provides a desktop computer having a conventional and separate physical keyboard that is neither portable nor hand-held with an auxiliary display for displaying execution results "together with the main display device." (See Abstract.)

Thus, neither teaches applicants' claimed invention. Apparently, from the Examiner's thorough prior art search, there are no such prior art teachings. This is despite the fact that portable hand-held devices have been around for dozens of years and the need to address problems of display size and information capacity and key entry have been long-felt, as evidenced by the alternative approaches, discussed above, to solving the split-screen, single-display, tiny-keyboard problem.

Accordingly, claims 1-32 dealing with a particular combination of main and auxiliary displays in a portable hand-held device are not obvious over the known prior art.

For the foregoing reasons, reconsideration and allowance of claims 1-33 of the application as amended or added is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.




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